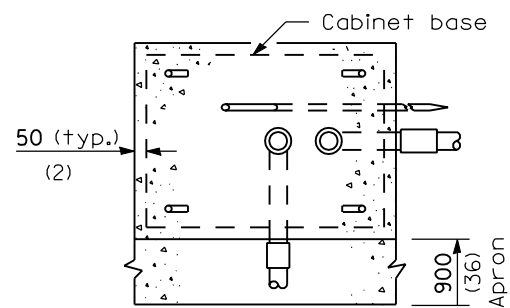
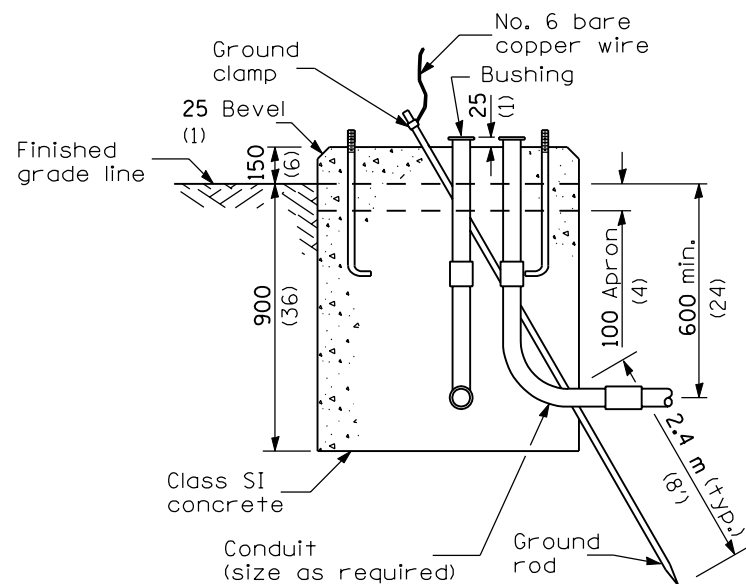


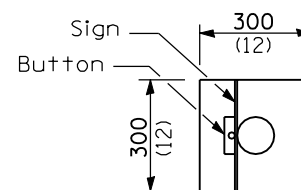
TYPE A



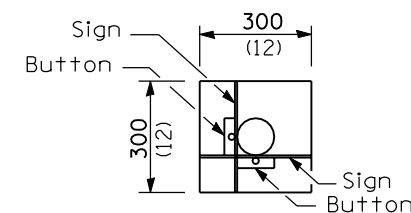
TOP VIEW



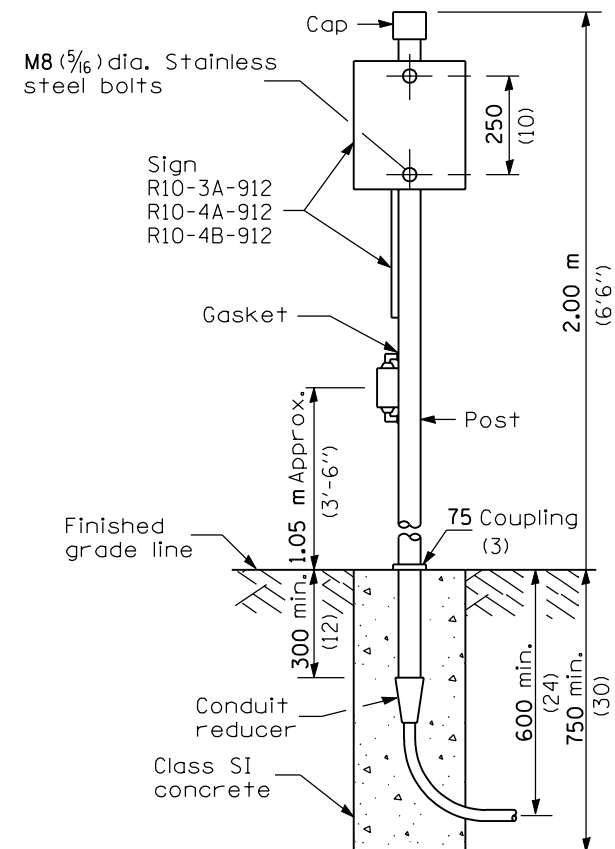
**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET**



**TOP VIEW
TYPICAL ONE BUTTON INSTALLATION**



**TOP VIEW
TYPICAL TWO BUTTON INSTALLATION**



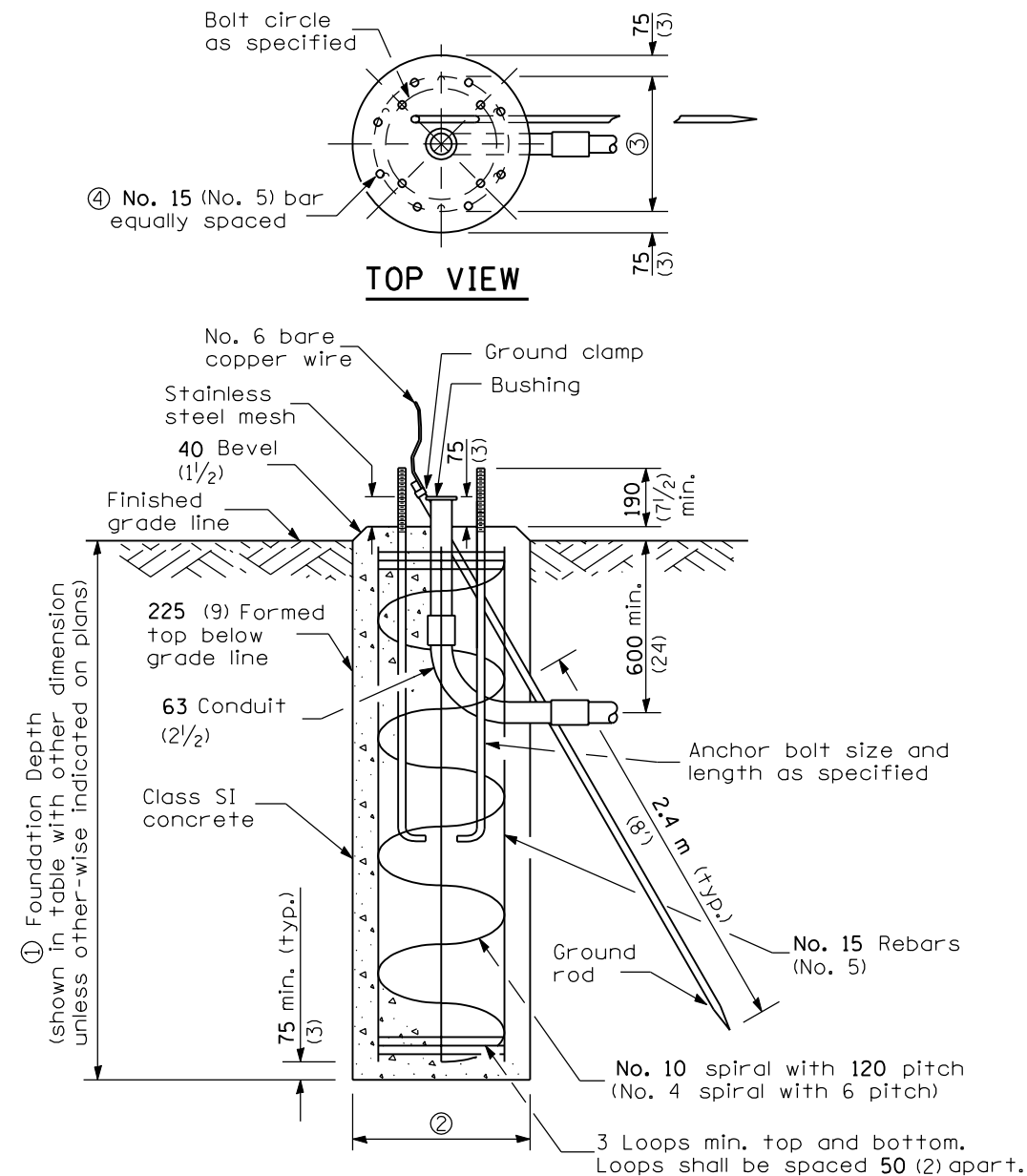
**PEDESTRIAN PUSH BUTTON
POST INSTALLATION**

All dimensions are in millimeters (inches) unless otherwise shown.

APPROVED _____ January 1, 2004 ENGINEER OF OPERATIONS APPROVED _____ January 1, 2004 ENGINEER OF DESIGN AND ENVIRONMENT	ISSUED 1-1-02

DATE	REVISIONS
1-1-04	Revised Type E foundation table.
1-1-03	Added alternate Type E foundation depths and diameters.

**CONCRETE
FOUNDATION DETAILS**
 (Sheet 1 of 2)
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TYPE E

Mast Arm Length	① Foundation Depth *	② Foundation Diameter	③ Sprial Diameter	④ Quantity of No. 15 (No. 5) Bars
Less than 9.1 m (30')	3.0 m (10'-0")	750 (30)	600 (24)	8
Greater than or equal to 9.1 m (30') and less than 12.2 m (40')	4.1 m (13'-6")	750 (30)	600 (24)	8
	3.4 m (11'-0")	900 (36)	750 (30)	12
Greater than or equal to 12.2 m (40') and less than 15.2 m (50')	4.0 m (13'-0")	900 (36)	750 (30)	12
Greater than or equal to 15.2 m (50') and up to 16.8 m (55')	4.6 m (15'-0")	900 (36)	750 (30)	12

* These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Q_u) > 100 kPa (1.0 tsf). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.

All dimensions are in millimeters (inches) unless otherwise shown.

**CONCRETE
FOUNDATION DETAILS**
(Sheet 2 of 2)

STANDARD 878001-02

Illinois Department of Transportation	
APPROVED _____ January 1, 2004 ENGINEER OF OPERATIONS	ISSUED 1-1-02
APPROVED _____ January 1, 2004 Michael L. Hine ENGINEER OF DESIGN AND ENVIRONMENT	